

Programme title:

Reading Plus

Website/for more information see:

<https://www.readingplus.com/>

What it involves:

Reading Plus is a web-based assessment and intervention programme that is designed to provide individualised silent reading practise in order to develop and improve reading fluency, comprehension, and vocabulary (Taylor Associates, Inc., 2015; What Works Clearinghouse, 2010). Individual needs are met by scaling the difficulty and duration of the reading tasks to match the abilities of each student. The programme is intended for students in their third year of formal education or higher, and specifically targeted at those with learning disabilities or low reading achievement. Implementation is possible in public or private educational institutions, reading clinics, or home settings.

Preliminary assessment is conducted by a component called InSight, which determines the level and rate of each individual's reading abilities and then selects the appropriate intervention path (Taylor Associates, Inc., 2015; What Works Clearinghouse, 2010). In the first part of this assessment, students are presented with a series of 100-word selections followed by literal recall questions. In the second part, the estimated reading level is confirmed with 300-word selections and a variety of comprehension questions. Finally, the third part measures vocabulary knowledge. Adjustments to the difficulty of the activities are made throughout the intervention period based on input from ongoing assessment exercises. This also provides students with continuous feedback on their progress through the programme (National Center on Intensive Intervention, n.d.).

Typical sessions are structured such that each begins with a Perceptual Accuracy and Visual Efficiency warm-up activity (National Center on Intensive Intervention, n.d.). The two components of this activity are Scan and Flash; Scan involves counting the number of times a target character appears on screen, while Flash requires students to recreate sequences of two to twelve letters or numbers flashed on screen. The intention of these warm-up activities is to build attention, eye-tracking, perceptual accuracy, and visual memory. Structured silent reading accounts for the majority of each session, and involves timed guided reading practise with a collection of approximately 600 narrative, expository, and informational texts. The silent reading activities automatically adapt for duration, level of content difficulty, degree of repetition, reading rate, and style of presentation based on both measured reading rate and responses to comprehension questions. Students are expected to develop reading comprehension, fluency, and stamina through this practise. The final part of each session is the cloze-structured vocabulary component, in which contextual analysis activities help to build word knowledge, vocabulary, predictive abilities, and inferential skills. In total, there are twenty-five reading comprehension skills tracked throughout these activities, and offline lessons are assigned to target particular deficiencies. Prescribed session length is thirty to sixty minutes, and implementation of the programme can vary in length and intensity from three times per week for seven weeks, to five times per week for thirty weeks (What Works Clearinghouse, 2010), though a minimum of forty sessions is recommended by the programme developers (Marrs & Patrick, 2002).

What claims does the company make/what does the programme target?

The underlying philosophy of the Reading Plus programme is based on the Fundamental Reading Process. Taylor (1995) describes this process as “the characteristic manner in which your visual, perceptual, and information processing capabilities initiate all reading.” This philosophy utilises the guided reading technique to improve reading rate and comprehension by developing perceptual and functional information processing skills. The mechanism by which this is thought to work is through increased efficiency and coordination of eye movement (Marrs & Patrick, 2002). Thus, the presentation of text is controlled and scaled to maximise visual efficiency for each student. Assessment of reading rate and comprehension is critical to this individualised approach, but the InSight tool also claims to measure reading motivation, highlighting this as an “often-overlooked” dimension of reading with significant impacts on academic outcomes and interest in reading as an instrument of lifelong learning (Taylor Associates, Inc., 2015). The silent reading texts, which are self-selected from eight different interest categories, are described as a way to ignite curiosity, make reading efficient and enjoyable, and encourage students to make connections, formulate opinions, and express and support those opinions with text-derived knowledge (Taylor Associates, Inc., 2015).

In short, the approach of the Reading Plus programme is to assess and develop what Taylor Associates (2015) describe as the three key dimensions of reading success: capacity, efficiency, and motivation, by changing “how students read, why students read, and what students are capable of reading.”

Prices:

School-based license and hosting costs: estimated US\$15 to US\$30 per student

Evidence for efficacy:

There is a small but significant contingent of research regarding the efficacy of the Reading Plus programme. The U.S. Department of Education Institute of Education Sciences’ What Works Clearinghouse Intervention Report (2010) concluded from a meta-analysis of research on Reading Plus that only one study at the time met their evidence standards with reservations (see: Reading Plus, 2008). This study included 13,128 low-achieving students between the ages of ten and fifteen in ninety-eight schools across Florida; 6,070 received six months of Reading Plus programming and 7,058 did not. Though What Works Clearinghouse assesses reading intervention programmes in terms of their effects on four domains of reading (alphabetic, reading fluency, comprehension, and general literacy achievement), this particular study assessed only reading comprehension. The main finding of the report was potentially positive effects on comprehension for adolescent learners based on a small extent of evidence from one qualifying study and an improvement index of plus two percentile points as a result of the intervention. A few other well-designed studies have identified similar improvements in reading comprehension following use of the Reading Plus programme, the results of which are summarised briefly below:

1. *The Relationship Between a Silent Reading Fluency Instructional Protocol on Students’ Reading Comprehension and Achievement in an Urban School Setting (Rasinski et al., 2011)*: This study is an extension of the large-scale study in Florida described above. It examined the effects of the Reading Plus intervention on 5,758 students in grades four through ten with 10,385 control students. Treatment involved either two forty-five-minute sessions or three thirty-minute sessions per week for six months. Assessment was by two Florida state standardised tests; both of these showed significantly greater improvement in reading comprehension and overall reading achievement by the students receiving the Reading Plus programme with small to moderate effect

sizes. Additionally, the study identified a positive correlation with the number of sessions a student received and their gain scores, such that more sessions resulted in greater reading achievement. Mean gain scores for these students were significantly larger than the state-wide norms at every grade level. However, the majority of students enrolled as English language learners did not demonstrate significant gains after the intervention.

2. *Exploring the Value Added of a Guided, Silent Reading Intervention: Effects on Struggling Third-Grade Readers' Achievement (Reutzel, Petscher, & Spichtig, 2012)*: This study assessed the effects of Reading Plus on forty matched pairs of struggling third-grade readers who had been held back from promotion to grade four. While the treatment group received the Reading Plus intervention, the matched control group received one of three other supplementary reading programmes. Results indicated a statistically significant positive effect of the Reading Plus programme on the post-test scores for reading proficiency on one of the standardised tests administered, but not on the other. This finding was ascribed to the low statistical power for this particular test. Overall, these results were taken to suggest a positive relationship between Reading Plus and reading achievement.

Evidence against efficacy:

The most considerable limitation of the Reading Plus research is the scope of the published, peer-reviewed studies. The larger part of the experimentally-robust evidence supporting Reading Plus is derived from a single study conducted in Florida. While this study was very large in scope, and has therefore provided data for several different research articles, there is limited evidence from other populations. As described in the What Works Clearinghouse meta-analysis (2010), the majority of research articles concerning Reading Plus suffer from a lack of adequate control groups and poor experimental design. However, the evidence provided by this study and validated in the What Works Clearinghouse report is robust, significant, and based on a substantial amount of data, and thus provides considerable support for the use of Reading Plus as a remedial reading programme.

Other concerns regarding the efficacy of Reading Plus are highlighted in some of the null results described above; in the study by Reutzel, Petscher, & Spichtig (2012), the same programme was found to have significant effects on reading comprehension on one standardised measure, but no effects on another comparable measure. While this discrepancy may be explained by low statistical power, it is also possible that this finding or the particular demands of that test reflect some ineffective aspect of the programme. Finally, none of the studies reviewed here have assessed the long-term effects of the Reading Plus programme, which is an important consideration of any educational intervention.

Conclusions:

As described above, the large-scale study conducted in Florida and validated in the What Works Clearinghouse report (2010) has provided substantial evidence in support of the use of Reading Plus as a remedial reading programme. Future research will need to diversify the existing portfolio of research on Reading Plus, with an emphasis on robust experimental design.

References:

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